	Work Order ID 97724 Sebruary-21-13 12:41:45 PM		*97724*										
Item ID: Revision ID: Item Name:	D4021-7			Accept	*N900	040	100)*	Setup S	Start Stop		S1* S2*	
Start Date: Required Date: Reference:	3/06/13	Start Qty: 4.00 Req'd Qty: 4.00			Cust Item I Customer:	D:							
Approvals:		in: MCT	Date: <u>/ 3 ~</u>) Z	•		ate:				Start Stop		R1* R2*	
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	t Reje		leject lumber	Insp. Stamp	
Draw Nbr	Rev	vision Nbr											
D4021	В			•									
100 *1 Waterjet		Memo	¢.	0.00				6		2		Jm13-3-	٠) ٦
FLOW CNC Water 304 BAR	rjet • 62 5 ⊁,2	Cut as p Prog Re Dwg Re			·					٠	,		
110		QC2- Inspect parts of	ff machine FAI/FAIB	0.00				(-			·	Jm 13-3	21
*11 0 *		Memo		0.00				6		<u> </u>		JMIG	7 1

Memo

Quality Control

NCR:	Yes	1	No
NCN.	169	/	INU

NCR: \	'es	/ No				WORK ORDER NON-	CON	NFORM	MANCE / UPI	DATE	QA Closed:	Date	:
Vork Orde	·r·					DISPOSITION		:	147	AGAINST DE			
vork Orde	:r. -					Rework	7		Skid-tube	Crosstube		Water Jet	Engineering
Part N	J O					Scrap	1 1		Machining	Small Fab	Prod	d. Eng. Coor.	Quality
·	٠٠.			,		Use-as-is	1 1		noforming	Finishing		e/Packaging	Other
NCR N	lo.					Work Order Update	1		Large Fab	Composite	,	Supplier	1 1
	•					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_	i	·				
Root	:			41-1-1-1	Descr	iption of work order update	Ţī	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
oc/Data													
quip/Tooling													
perator													
laterial													
etup													
ther													
rocess													
upplier													
raining													
napproved													
						F	AUL	T CATE	GORY				
Landi	ng (ear				General		_			-	_	-
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	t Concer	ntric to	o/s	BOM/Route		Hardwa	ire	<u> </u>	Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct	Weld
		Crushed/0	Crimped.			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs				Contamination		Mainte	enance		Part Moved		
		Heat Trea	t			Countersink		Mislabe	eled		Positioned V	Vrong	
		Inspection	n Strip in	Tube		Cut Too Short		Misread	d		Power Loss/	Surge	Other
		Ripples in	•			Drill Holes		Offset		<u> </u>			
		Torque W		xtrusio	n	Drawing		Out of	Calibration			***************************************	
		Turning Se			<u> </u>	Finish		Out of 9	Sequence				
		Wave/Tw	-			Folio		Outside	Dimensions	•			

DQA:

Date:

Work Orde February-21-13				*977					Page 2		
Revision ID:	D4021-7 Hoop			Accept	*N900	040	100)* s	etup St St	1	NS1* NS2*
Start Date: Required Date: Reference:	3/06/13 3/06/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:			. 64		
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ate:		· R		art *	VR1*
	QC:		Date:	_ SPC (Y/N):	Da	ate:			Si	top *	NR2 *
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Numb	
120		QC8- Inspect parts - secon	nd check	0.00							
120 QC Quality Control		Memo		0.00 9- 00 3	103/14			(46)			
130				0.00							
130				0.00				(ط))	<u>5-03-3</u>	0 80

140

QC5- Inspect part completeness to step on W/O

0.00 13 3 20

140

Memo

Quality Control

*130° Small Fab

Small Fab

Memo

0.00

1- make radius as per dwg

2- deburr

							DQA:	Date:	
NCR: Y	es / No			WORK ORDER NON-C	ONFORM	MANCE / UPDATE	QA Closed:	Date:	
Work Orde	ır:	,		DISPOSITION		AGAINST DE	PARTMENT	PROCESS	
Part N	lo			Rework Scrap Use-as-is Work Order Update	Therm	Skid-tube Crosstube Machining Small Fab noforming Finishing Large Fab Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Description of work order update	Initial	Action	Sign &		
Cause	Date	Step	Qty	or Non-conformance	Chief Eng	Description	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other									

FAULT CATEGORY General **Landing Gear** Grain Ovalized Pressure/Forced Bend Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Cracks Broken/Damaged Inspection Incomplete Weld Part Incorrect Part Lost/Missing Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Cuffs Contamination Maintenance Part Moved Positioned Wrong Heat Treat Mislabeled Countersink Power Loss/Surge Other Inspection Strip in Tube Cut Too Short Misread Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Out of Sequence Finish

Outside Dimensions

Wave/Twist in Tube

Folio

Process
Supplier
Training
Unapproved

Work Order ID 97724 February-21-13 12:41:45 PM Accept Item ID: D4021-7 *N900040100* Setup Start **Revision ID:** Stop Item Name: Hoop *4* Start Qty: 4.00 **Start Date:** 3/06/13 **Cust Item ID: Req'd Qty:** 4.00 Required Date: 3/06/13 **Customer:** Reference: Run Start Date: Tooling: Approvals: Process Plan: Date: Stop Date: _____ SPC (Y/N): QC: Date: Reject Reject Sequence ID/ Set Up/ Tool ID Tool # Plan Accept Operation Number Stamp **Work Center ID Description** Code Qty Qty **Run Hours** Identify as per dwg & Stock Location: WAOVY -0.00 150

160

QC21- Final Inspection - Work Order Release

0.00

0.00

160

150

Packaging

Packaging

QC Quality Control

Memo

Memo

0.00

MF 13-3-21

Page 3

Insp.

NCR:	⁄es	/ No				WORK ORDER NON-C	100	VFOR	MANCE / UF	PDATE	QA Closed:	Dat	te:	
Work Orde	er.				V0.T.	DISPOSITION				AGAINST	PARTMENT/			
Part f	- . No.					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining Moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. e/Packaging Supplier		Engineering Quality Other
Root					Descri	ption of work order update		Initial	A	ction	Sign &			
Cause		Date	Step	Qty	(or Non-conformance	Ct	nief Eng	Des	cription	Date	Verification	٦	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved											, re			
							AUI	LT CATE	GORY		 			
Landi		iear Bending Centre No Cracks	ot Conce	ntric to	o/s	General Bend BOM/Route Broken/Damaged		Grain Hardwa	re ion Incomplete		Ovalized Over/Under Part Incorre			Pressure/Forced Temperature/Cure Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

DQA:

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

Date:

Wrong Stock Pulled

Other

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Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Picklist Print

February-21-13 12:41:45 PM

Work Order ID:

97724

Parent Item:

D4021-7

Parent Item Name:

Hoop

Start Date: 3/06/13

Required Date: 3/06/13

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP RevA: new issue DD 09.11.25 verified by:EC

IPP Rev:C as per dwg revB DD 10.04.20 verified by:EC

IPP Rev:B as per dwg REV.A DD

	10.02.22 verified	by:EC IPP Re	v:C as per	r dwg revB D	D 10.04.20 ve	erified by:EC							
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B0.625X3.000 304 BAR .625 X 3.00		Purchased	No			100	f	16.9167	0.4166	1.7541052			 Jn13.3.1

Location Loc Qty Loc Code MAT049 16.9167 123097 15FEB 123721 12.9167

										DQA:	bate:	
NCR: Yes	/ No				WORK ORDER NON-	OI	NFORI	MANCE / UP		QA Closed:	Date:	
Work Order:					DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
Part No.					Rework Scrap Use-as-is		1	Skid-tube Machining noforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR No.					Work Order Update]	1110111	Large Fab	Composite	, , , , , , , , , , , , , , , , , , , ,	Supplier	
Root		T T	T'	Descri	ption of work order update	T	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty	L	or Non-conformance	1	nief Eng	į	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator												
Material Setup				,								
Other Process												·
Supplier	1											
Training Unapproved												
					F	AUI	LT CATE	GORY				
Landing	Gear		,		General							

	.B		•	• <u></u>	
[Bending	Bend	Grain	Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld
	Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
	Cüffs	Contamination	Maintenance	Part Moved	
[Heat Treat	Countersink	Mislabeled	Positioned Wrong	
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge	Other
	Ripples in Bend	Drill Holes	Offset		
[Torque Waves in Extrusion	Drawing	Out of Calibration		
	Turning Sequence	Finish	Out of Sequence		
Π	Wave/Twist in Tube	Folio	Outside Dimensions		

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

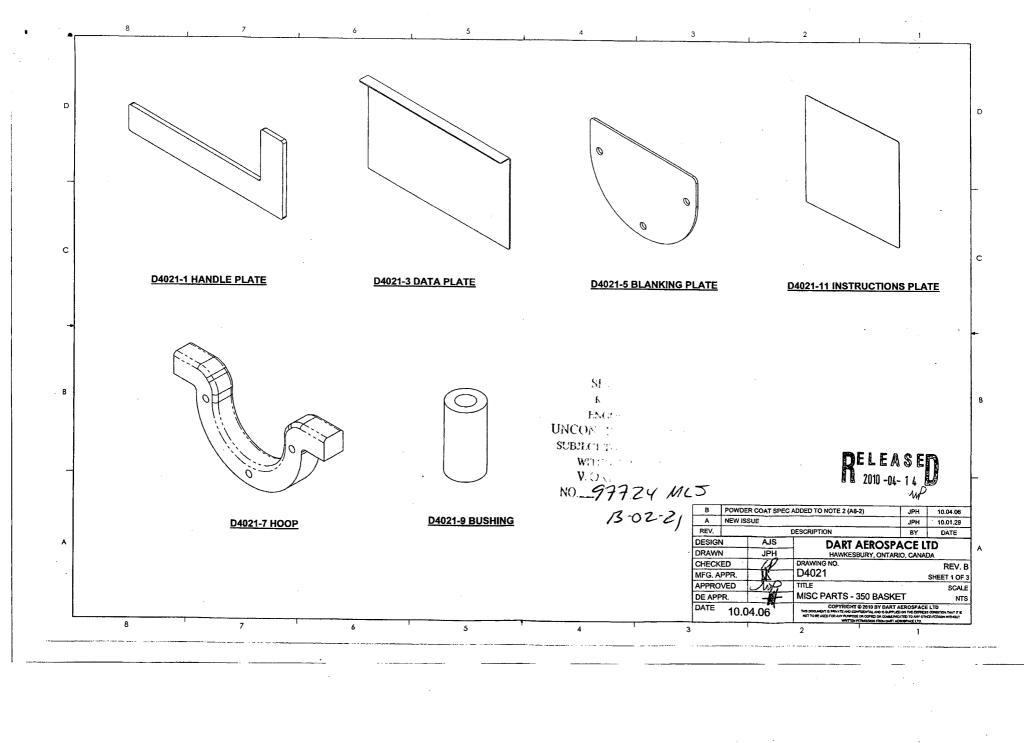
DART AEROSPACE LTD	Work Order:	97724
Description: Hoop	Part Number:	D4021-7
Inspection Dwg: D4021 Rev: B		Page 1 of 1

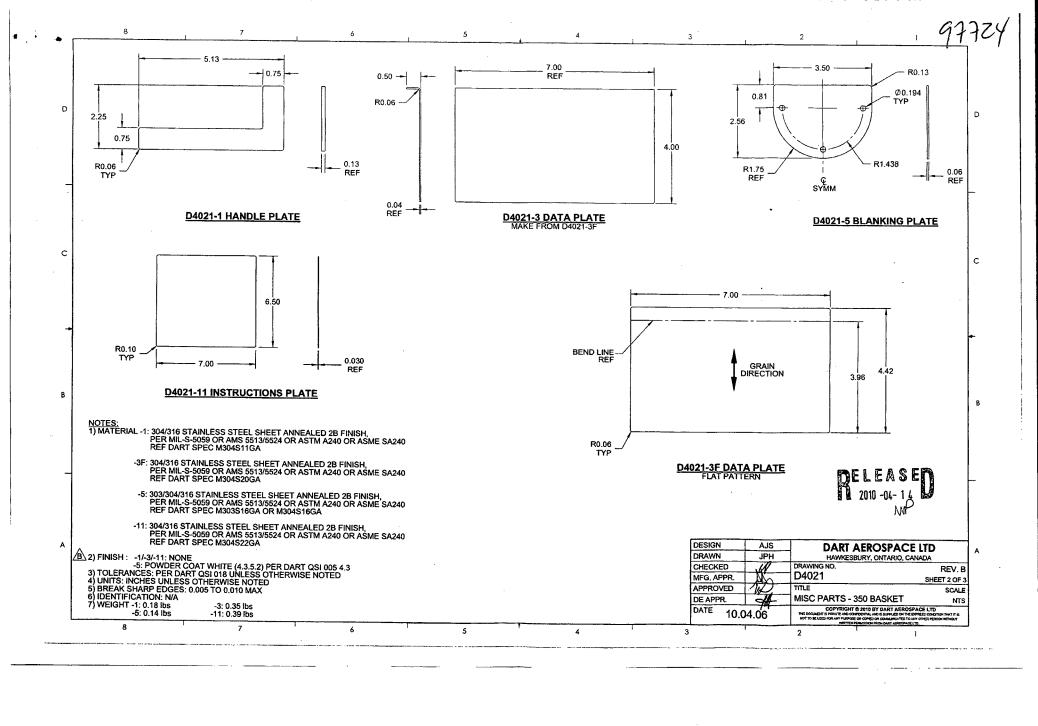
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.194	+0.005/-0.001	0.195"	-		V	Jamos
1.38	+/-0.030	1.3684	<u></u>		V	
2.25	+/-0.030	2.250'			Ý	
5.00	+/-0.030	4.982	•		V	
0.813	+/-0.010	0.815° 2.498°	<u> </u>		>	
2.500	+/-0.010	2.498"	١.		V	
2.56	+/-0.030	2.559"	-		Ý	
0.63	+0.000/-0.050	0622	レ		V	
						40) 10
						2.
	-					

Measured by: Jyy	Audited by:		Preliminary Approval:	N/A
Date: 13-3-17	Date:	16 B/8/18	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	10.04.01	New Issue	KJ	1.1
В	10.08.18	Dimensions revised per Dwg Rev B	KJ K	





D Ø0.191 -Ø0.38 5.00 R0.50 4 PL R0.10 2 PL 0.63⁺0.00 -0.05 45° 0.813 ==== С R1.125 REF 2.56 REF Ø0.194 0.75 R1.438 R1.75 -- 0.63^{+0.00} **D4021-9 BUSHING** 2.500 **D4021-7 HOOP** NOTES: 1) MATERIAL-7: 304/316 STAINLESS STEEL BAR, PER ASTM A276 REF DART SPEC M304B MP -9: 304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 REF DART SPEC M304R
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT -7: 0.80 lbs DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA AJS DRAWN JPH CHECKED DRAWING NO. D4021 MFG. APPR. SHEET 3 OF 3 APPROVED TITLE SCALE MISC PARTS - 350 BASKET DE APPR. NTS COPYRIGHT © 2010 BY DART AEROSPACE LTD
THIS OCCURRENT & PROVINCE AND COMPANY AND ESCAPPILLO ON THE COPYRIST COMPANY AND THE WORLD FOR ANY AMERICAN AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESSM -9: 0.02 lbs DATE 10.04.06 2